



# Risk and Protective Factors for Work-Family Conflict among Female Military Spouses

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## Abstract

Work-family conflict (WFC) is a chronic issue among military families. Compared to their civilian counterparts, military families experience additional work demands such as frequent training exercises and deployment, military-specific trauma, and injury in garrison, training or deployed settings. Guided by a risk and protective factors framework, this study examined the direct effects of cumulative military-specific work risks (i.e., number of combat deployments, mental health, injury during combat deployments) and cumulative family risks (i.e., children in the home, spouse adverse childhood experiences, spouse employment) on WFC and the potential buffering effect of social support among female military spouses. This study is a secondary data analysis ( $n = 334$ ) using Land Combat Study 2 data collected by the Walter Reed Army Institute of Research (WRAIR) in 2012. After controlling for covariates (including soldier rank, ethnicity, and age), cumulative military-specific risk factors were positively associated with WFC while family risks were not. Social support was negatively associated with WFC but did not exhibit interaction effects with either group of risks. Findings suggest military spouses perceive WFC due to service members' military-specific work factors, and social support was a promotive factor which may alleviate experiences of WFC. Military leadership and behavior health providers should consider strategies to alleviate work-specific risks and promote social support for military spouses to reduce WFC.

**Keywords** Work-family conflict · Military population · Military-specific work risk · Family risk · Female spouse

## Highlights

- Cumulative military-specific risk factors were associated with WFC among military spouses.
- Family risks were not found to be associated with WFC among military spouses.
- Social support had a generally promotive effect on WFC, rather than a protective effect on present risks.

While military families face many of the same challenges as civilian families, their unique experiences add a number of

demands not placed on the general population (Burrell et al., 2006). The spillover effect of military-related duties on family functioning has been well-documented in previous studies (Blessing et al., 2020; Cigrang et al., (2014); O'Neal et al., 2018). Service members and their spouses may report higher levels of work-family conflict (WFC) than their civilian peers (McFadyen et al., 2005). WFC is a critical outcome to consider for both service members and their families as it has been associated with important work-related outcomes (e.g., job satisfaction, turnover, organizational commitment), family outcomes (e.g., family satisfaction, marital satisfaction), personal physical health outcomes (e.g., eating and exercise behaviors, physical symptoms), and psychological health outcomes (e.g., life satisfaction, stress and depressive symptoms; Allen & Armstrong, 2006; Allen, Herst, Bruck, & Sutton, 2000;

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Grandey & Cropanzano, 1999; Kossek, Lautsch, & Eaton, 2006; Kossek & Lee, 2017; Kossek & Ozeki, 1998; Netemeyer, Boles, & McMurrin, 1996). However, there remains little research on this topic among military families and therefore little understanding of how to reduce the conflict between military and family obligations, thereby reducing its potential negative outcomes. Therefore, guided by a risk and protective factors framework (National Academies of Sciences, Engineering, & Medicine (2019)) the present study explores the link between both work- and family-related risk factors and WFC, then examines the role of social support as a potential buffer which might reduce the felt impact of these risk factors on the military family.

## Theoretical Framework

Risk factors are defined as challenges that could impact family and marital functioning (National Academies of Sciences, Engineering, & Medicine (2019)). A protective factor is defined as a characteristic or experience associated with better outcomes when in the presence of risk factors which is distinct from a promotive factor, which associated with better outcomes regardless of present risk factors (National Academies of Sciences, Engineering, & Medicine (2019)). This study considers the potential for social support to serve as a protective factor resulting in decreased WFC in the presence of risk.

## Work-Family Conflict

Work-family conflict (WFC) exists when the demands of work and family are mutually incompatible, with either family conflicting with work, or work conflicting with family (French et al., 2018; Greenhaus & Beutell (1985)). This inter-role conflict can lead to both lower work satisfaction and lower family satisfaction, often resulting in lower overall life satisfaction (French et al., 2018; Kopelman et al., 1983). Work-family conflict has been applied to military spouses and families through the lens of “greedy institutions” (Segal, 1986). Both the military and family institutions place high demands on service members, leading to a conflict between work and family.

As military demographics have shifted away from single young men over the last several decades, with a rising average age, higher numbers of female service members, and more service members who are married and/or have children, the conflict between the demands of the military and the demands of the family is increasingly present. Civilian literature has linked WFC to depression, lower marital satisfaction, lower family satisfaction, and increased fatigue and need for recovery (Jansen et al., 2003; Perrone

et al., 2006). Military studies have linked WFC to lower organizational commitment and performance, as well as increased separation intention for service members (Allen et al., 2000). While marital and family satisfaction and WFC are not identical, there is a significant negative relationship between these constructs and they share a number of risk factors (Burley, 1995; Perrone et al., 2006).

## Military-Specific Work Risk Factors

### Number of Combat Deployments

Beginning in September 2001, service members and their families experienced a notable increase in the pace and frequency of combat deployment separation. This increased frequency meant that family dynamics were likely upended, leading to more potential WFC. Though WFC has rarely been measured among service members or their spouses, studies have found the number and length of deployments to be negatively related to family functioning and marital success (Adams et al., 2005), constructs which may be closely related to WFC. Others have found that deployments alone do not predict marital discord, but negative military experiences during or in response to those deployments, such as injury or mental illness, are statistically associated with lower marital quality (Pfleger et al., 2018). Cumulative experience of combat deployments has also been identified as a risk factor (Sullivan, Hawkins, Gilreath & Castro, 2020a).

### Service Member’s Mental Health

Previous studies have established a negative relationship between poor mental health in service members, and the health of their marriage and family functioning (Sayers et al., 2009). A service member’s poor mental health significantly increases the likelihood of marital problems, as well as family reintegration problems post-deployment (Sayers et al., 2009). Studies have linked depression severity to both family problems, such as family role confusion, as well as domestic violence (Coyne et al., 2002; Sayers et al., 2009). PTSD is similarly associated with poorer family functioning (Sullivan et al., 2018). The severity of PTSD symptoms in service members is also associated with spousal emotional distress, which may further influence WFC (Donoho et al., 2017). As there is an established link between depression and other mental illness and marital and family functioning, it is important to better understand the link between service members’ mental health and WFC specifically (Owens et al., 2009). When direct responses of service members’ mental health data are unavailable, the spouse’s perception on service member’s

mental health may be an alternative measure (Sullivan et al., 2021).

### **Injury during Combat Deployment**

Members of the military are at an increased risk for work-related injury as compared with the civilian population (Woodall et al., 2020). The relationship between injury and family discord has received less attention. Though the specific association between combat-related injuries and WFC has not previously been examined, prior studies note that coping with an injury can challenge existing relationship roles and might interfere with physical intimacy and fertility, which may put strain on a marriage (Sayers, 2011). Additionally, mental health diagnoses, including PTSD, are significantly higher among service members injured in battle as compared with non-injured service members (Sayer et al., 2015). As mental illness is associated with marital discord, injury may similarly increase the risk of marital discord and WFC.

### **Family Risk Factors**

#### **Children in the Household**

Within military families, having one or more children is significantly associated with higher levels of perceived WFC and lower levels of marital quality (Pflieger et al., 2018; Woodall et al., 2020). The demands of military work have been associated with spouses' increased level of parenting stress, potentially due to limitations in service members' parenting involvement (Mills & Torte, 2018). The demands of parenting, including time spent engaging with and caring for children which is likely elevated with more children in the home, increase the time and energy devoted to family obligations thereby increasing the amount of conflict between work and family as reported by service members and their spouses.

#### **Spouse Adverse Childhood Experiences**

Studies have found that military spouses with a history of multiple adverse childhood experiences (ACEs) are more likely to experience poor marital quality (Pflieger et al., 2018; Woodall et al., 2020). ACEs include potentially traumatic events such as experiencing childhood violence, abuse, or neglect; witnessing domestic or community violence; and experiencing instability at home due to family members' mental health problems and/or substance abuse (Centers for Disease Control and Prevention, 2020). These childhood events are strongly associated with low marital quality in adulthood, which suggests a potential

relationship with WFC (Whisman et al., (2006); Woodall et al., 2020).

### **Spouse Employment Status**

Military spouses who work part-time or full-time, or who are unemployed but looking for work, have been found to be at a higher risk for poor marital quality than spouses who are out of the workforce by choice (Woodall et al., 2020). This risk factor is particularly relevant for military spouses as the unpredictable nature of military life can make it difficult to maintain and advance within a job. Frequent moves and lack of control over location may result in unemployment or under-employment (Harrell et al., 2004). While satisfying employment is associated with many positive outcomes for military spouses, those who are employed may also experience role overload, balancing both a career and the parenting and family duties of a military spouse, potentially without the assistance of a deployed partner (Pflieger et al., 2018). That increased stress may increase WFC.

### **Social Support as a Protective Factor**

Using a risk and protective factors framework, social support may function as a buffer, which could lessen the impact of various military work- and family-related risk factors on reported WFC (Skomorovsky, 2014). Social support within the military is linked to a greater sense of control and lower levels of emotional distress as well as better marital functioning (Cederbaum et al., 2017; McFadyen et al., 2005). If military spouses have people other than their service member spouse to whom they can turn for emotional support, advice and help, that support might buffer against feeling the full extent of the potential work-family conflict (Ayman & Antani (2008)).

### **The Current Study**

The current study explores the relationship between risk factors, protective factors, and perceptions of work-family conflict. We separated risk factors into two groups: military work risk factors, which result specifically from service members' military service, and family risk factors, which refer to spouses' childhood and adult experiences, which may impact their current family environment. Recent studies have documented the importance of considering the accumulation of risk factors in the lives of military families (MacDermid Wadsworth et al., 2016; Sullivan et al., 2020a, Sullivan, Hawkins, Gilreath & Castro, 2020b; Sullivan et al., 2021). As such, the current study examines cumulative risk, quantifying a spouse's overall work and family

risk level rather than their exposure to each individual risk. We then examined the relationship between each group of risk factors and WFC, first independently, and then with social support as a moderating factor. This exploration was guided by two hypotheses:

1. Both military work and family risk factors will be significantly positively associated with WFC.
2. Social support will function as a protective factor, attenuating the relationship between risk factors and WFC.

## Methods

### Procedures and Participants

The present study uses data collected in 2012 through the Land Combat Study 2, completed by the Walter Reed Army Institute of Research (WRAIR; Thomas et al., 2010). Married service members' spouses were recruited by the brigade's Family Readiness Support Assistant. Flyers were circulated in-person and online, and recruitment information was passed through the service members to their spouses. The spouse survey response rate was 23% and 98% of those who responded completed a survey, resulting in 343 total participants (Sinclair et al., 2019). Of those 343, nine male spouses were removed, leaving a final sample of 334 female spouses. Approximately 75% of surveys were completed online, and 25% were completed in-person. Participants who received a link to an online survey also received a \$5 pre-incentive gift card (Sinclair et al., 2019).

Survey participants were majority White (74.5%), married to enlisted service members (78.6%), not currently employed either looking or not looking for work (70.1%), and living with children in the household (70.1%). Just under half were aged 30 or older (48.4%). The majority of participants (81%) had experienced at least one deployment. Roughly half (49.7%) of participants had at least some college or an associate degree, roughly one third (33.4%) had a bachelor's degree or higher, and 16.9% reported a high school degree, GED or less.

### Measures

Informed by a risk and protective factors framework and prior literature, models included two cumulative risk factor variables: 1) military-specific work risk factors and 2) family risk factors. All risk factors are explored using dichotomous indicators where one represents the presence and zero represents the absence of each risk. To create these

dichotomous indicators, continuous and non-binary categorical variables were dichotomized using either previously established cut-points indicating high risk, prior empirical literature, or at the highest quartile of exposure, following MacDermid-Wadsworth and colleagues (MacDermid Wadsworth et al., 2016). Multivariate models predicting perceptions of work-family conflict included one protective factor, social support, and three control variables (age, rank, and race/ethnicity). These variables were measured and operationalized as follows.

### Military-Specific Work Risk Factors

Cumulative military-specific work risk factors included cumulative deployments, spouse perceptions of service member mental health, and service member illness or injury while deployed.

**Cumulative Deployments** A single item on the survey assessed the number of deployments of 30 days or longer since 2001. Response options ranged from 0 to 39. Spouses who reported four or more deployments fell in the upper quartile of this sample and were given a score of one; all other respondents received a score of zero.

**Spouse Perceptions of Service Member Mental Health** The survey asked spouses one question regarding their partners' mental health, which read: "Have you noticed any behaviors in your spouse that make you think they need mental health treatment?" Spouses who responded *yes* to this question were given a score of one; all other respondents received a score of zero.

**Service Member Illness or Injury while Deployed** Illness or injury was assessed with one question, which asked: "Did your spouse have a serious injury or illness while they were deployed?" This question has four response options: *no*; *yes, most recent deployment*; *yes, earlier deployment*; and *yes, most recent and earlier deployment*. Spouses who endorsed any *yes* response were assigned a score of one; all other respondents received a score of zero.

### Family Risk Factors

Cumulative family risk factors included children in home, spouse adverse childhood experiences, and spouse employment.

**Children in the Home** The presence of children in the family home was assessed with one question, which asked: "How many children do you have?" Eight response options ranged from *zero* to *seven or more*. Spouses who selected any response option other than *zero* were assigned a score

of one; spouses that reported they had zero children were assigned a score of zero.

**Spouse Adverse Childhood Experiences** Seven modified items from the ACEs questionnaire were used on the survey (Felitti et al., 1998). Three items which assessed household dysfunction (e.g. *anyone living in your household who was depressed or mentally ill*) had dichotomous *yes/no* response options. An additional four items began with the prompt: “when you were growing up how often did a parent or adult living in your home...” and included five response options from *never* to *very often*. These items measured maltreatment and included emotional, physical, sexual abuse and witnessing intimate partner violence. These four items were dichotomized such that any response other than *never* was considered a *yes* response. Finally, all seven items were summed. Spouses indicating four or more adverse childhood experiences were in the upper quartile in our sample and were assigned a score of one; all other respondents were given a score of zero.

**Spouse Employment** Spouse employment status was measured with a single item on the survey that included 6 response options: *paid full-time employment; paid part-time employment; active duty military; no paid employment, looking for work; no paid employment, not looking for work; and other*. Consistent with prior literature, spouses who endorsed *no paid employment; not looking for work* were deemed to be at lower risk for WFC and assigned a score of zero; all other respondents were assigned a score of one.

### Protective Factor

**Social Support** Social support was measured with three items from the MOS social support survey (Sherbourne & Stewart, 1991). The prompt for these questions asks spouses, “How often is each of the following kinds of support available to you if you need it?” Response options include: *someone to give you good advice about a crisis* and *someone to take you to the doctor if you needed it*. Five response options ranged from *none of the time* to *all of the time*. Internal consistency of this scale in the present sample was good ( $\alpha = 0.87$ ). Spouse responses to each item were averaged to create a continuous variable ranging from one to five.

### Outcome

**Perceptions of Work-Family Conflict** Perceptions of work-family conflict was measured with five items adapted from the Work-Family Conflict Scale (Netemeyer, Boles & McMurrian, 1996). Sample items from this scale include: *the demands of my spouse’s work interfere with my home*

*and family life* and *my spouse’s job produces strain that makes it difficult to fulfill family duties*. Responses were measured on a seven-point Likert scale from *strongly disagree* to *strongly agree*. Internal consistency of this scale in the present sample was excellent ( $\alpha = 0.92$ ). Spouse responses to each item were averaged to create a continuous variable ranging from one to eight.

### Control Variables

Age was measured as a categorical variable with response options that included: *18–19, 20–24, 25–29, 30–39, 40 or older*. Race/ethnicity was operationalized as a dichotomous variable: *white, non-white*. Finally, service member rank was included as a dichotomous variable: *Officer/Warrant Officer, Enlisted (E1–E9)*.

### Data Analysis

Before proceeding to multivariate models, cumulative military work risk and family risk variables were created using the following process to account for possible missing data. Prior to the main analysis, we conducted STATA’s missing completely at random (MCAR) test to address any concerns regarding missing data. Study variables pass the MCAR test as indicated by the non-significant *p*-value ( $p = 0.07$ ). Hence, the findings suggest there were no significant patterns of missingness (Little (1988)). The average of each spouse’s dichotomized scores on each risk indicator was taken and multiplied by the number of indicators in the risk category. For example, to create the family risk variable, spouses 0/1 risk indicator scores on children in the home, ACEs, and employment were averaged and multiplied by three to create a cumulative family risk variable which ranged from 0–3. All data cleaning and creation of cumulative variables was completed using STATA version 14.1 (Stata Corporation, 2015). Descriptive statistics, correlation analysis were run using STATA version 14.1 and multivariate models were run using Mplus version 7 (Muthén & Muthén, 2012). Full information maximum likelihood, available in Mplus, accounted for missing data in multivariate models.

### Results

Table 1 presents sample characteristics ( $N = 334$ ). Military spouses were most likely to be married to enlisted service members (78.61%), and a large proportion were white (74.47%), followed by Hispanic (10.81%), Black (7.21%), Asian/Pacific Islander (3.90%), and other (3.60%). Roughly 89% of spouses were less than 40 years old. With regard to variables of interest in this study, on average, spouses



**Table 1** Demographics and Characteristics of Modeled Variables

Variables	Obs.	Mean (SD)/n (%)	Min-Max
<i>Variables of Interest</i>			
Perceptions of Work-Family Conflict	331	4.43 (1.55)	1–7
Work Risks	334	0.48 (0.68)	0–3
Family Risks	333	1.39 (0.77)	0–3
Social Support	330	3.69 (1.14)	1–5
<i>Demographics</i>			
Rank	332		
Officer		71 (21.39%)	
Enlisted (E1–E9)		261 (78.61%)	
Ethnicity	333		
White		248 (74.47%)	
Black		24 (7.21%)	
Hispanic		36 (10.81%)	
Asian/Pacific islander		13 (3.90%)	
Other		12 (3.60%)	
Age	333		
18–24		61 (18.32%)	
25–29		111 (33.33%)	
30–39		126 (37.84%)	
40 or older		35 (10.51%)	

N = 334

scored 4.43 (SD = 1.55) on the perceptions of work-family conflict scale, within a range of 1 to 7. Spouses scored higher on family risks compared to work risks. On average, spouses endorsed less than 1 work risk (Mean = 0.48, SD = 0.68) with a range of 0 to 3 and between 1 and 2 family risks (Mean = 1.39, SD = 0.77) with a range of 0 to 3. On average spouses scored 3.69 (SD = 1.14) on the social support scale, with a range from 1 to 5.

Table 2 presents the bivariate correlations between study variables. As expected, perceptions of work-family conflict was positively associated with work risks ( $r = 0.22$ ,  $p < 0.001$ ) and negatively associated with social support ( $r = -0.22$ ,  $p < 0.001$ ). There was no association between cumulative family risk and perceptions of work-family conflict at the bivariate level.

Table 3 displays the results of the moderation analysis controlling for covariates (e.g., rank, ethnicity, and age). Results of moderation analysis indicate that the main effects of work risks and social support on perceptions of work-family conflict were statistically significant. Work risk was positively associated with perceptions of work-family conflict ( $b = 0.318$ ,  $p < 0.001$ ); and social support was negatively associated with perceptions of work-family conflict ( $b = -0.340$ ,  $p < 0.01$ ). However, family risks did not have a significant effect on perceptions of work-family conflict.

**Table 2** Bivariate Correlations among Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Perceptions of Work-family Conflict	1.00													
2 Work Risks	0.22***	1.00												
3 Family Risks	0.04	0.10	1.00											
4 Social Support	-0.22***	-0.11	-0.20***	1.00										
5 Officer	0.21***	-0.01	-0.09	0.14*	1.00									
6 White	0.07	0.07	-0.09	0.08	0.17***	1.00								
7 Black	0.01	0.12*	0.16**	-0.04	-0.09	-0.48***	1.00							
8 Hispanic	-0.03	-0.09	0.05	-0.09	-0.06	-0.59***	0.10	1.00						
9 Asian/Pacific Islander	-0.03	-0.12*	-0.04	0.02	-0.07	-0.34***	-0.06	-0.07	1.00					
10 Others	-0.07	-0.04	-0.06	-0.01	-0.10	-0.33***	-0.05	-0.07	-0.04	1.00				
11 Age 18–24	-0.06	-0.22***	-0.18***	0.00	-0.19***	-0.01	-0.10	0.09	-0.02	0.03	1.00			
12 Age 25–29	0.06	-0.02	-0.15**	0.05	-0.01	0.08	-0.05	0.00	-0.08	-0.03	-0.33***	1.00		
13 Age 30–39	0.06	0.11*	0.19***	-0.06	0.14*	-0.02	0.05	-0.05	0.10	-0.02	-0.37***	-0.55***	1.00	
14 Age 40 Above	-0.11*	0.13*	0.16**	0.03	0.04	-0.07	0.13*	-0.02	-0.02	0.04	-0.16**	-0.24***	-0.27***	1.00

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

**Table 3** Results of Regression Model of Moderation Effects of Social Support on Work and Family Risk Factors

	Unstandardized Estimates ( <i>se</i> )	Standardized Estimates ( <i>se</i> )
Covariates		
Officer	0.553 (0.105)***	0.259 (0.048)***
Ethnicity		
Black	0.025 (0.189)	0.007 (0.055)
Hispanic	−0.099 (0.184)	−0.035 (0.065)
Asian/Pacific islander	0.082 (0.223)	0.018 (0.048)
Others	−0.133 (0.265)	−0.029 (0.057)
Age		
25–29	0.023 (0.132)	0.012 (0.071)
30–39	−0.118 (0.139)	−0.065 (0.077)
40 Above	−0.499 (0.186)**	−0.176 (0.066)**
Main Effects		
Work Risks	0.318 (0.071)***	0.246 (0.055)***
Family Risks	0.047 (0.059)	0.041 (0.052)
Social Support	−0.340 (0.113)**	−0.349 (0.116)**
Moderation Effects		
Work risks * Social Support	0.125 (0.077)	0.105 (0.065)
Family risks * Social Support	0.044 (0.064)	0.078 (0.112)
R <sup>2</sup> , <i>p</i> -value	R <sup>2</sup> = 0.183, <i>p</i> < 0.001	

For ethnicity, White was the reference group

For age, 18–24 was the reference group

\*\**p* < 0.01, \*\*\**p* < 0.001

Further, neither the interaction effect between work risks and social support nor the interaction between family risks and social support were significantly associated with perceptions of work-family conflict. Overall, results of these analyses indicate that the model explained 18.3% of the variance in perceptions of work-family conflict.

## Discussion

While recent research has highlighted the individual and cumulative impact of work and family risk factors on military families, there remains little understanding of the correlates of WFC within these families. To further explore WFC among military families, this study examined two hypotheses. First, we hypothesized that military work and family risk factors would be significantly positively associated with WFC. This hypothesis was partially supported, as military work risk was positively associated with WFC, while family risk was not. Second, we hypothesized that social support would function as a protective factor, attenuating the relationship between risk factors and WFC. This hypothesis was not supported, as the interaction effects between social support and both types of risk were

not significantly associated with WFC. However, the direct effect of social support was negatively associated with WFC, indicating that social support had a generally promotive effect on WFC, rather than a protective effect on present risks.

In terms of main effects among the risk factor categories considered, only military-specific risk, which included number of combat deployments, spouse perception of service members' mental health, and service member deployment injuries/illness, was associated with increased WFC among female spouses. Military service generates substantial psychological, structural, and behavioral tensions with family life (Wadsworth & Southwell, 2011). Considering that risks associated with military work are likely to interfere or produce strains with home and family life, military spouses may experience increased WFC. For example, when a service member is physically absent from home due to deployment, a spouse will have to take full responsibility for the home. Further, a service member's mental health issue or injury due to military service may hinder fulfilling family duties, potentially transferring extra burden to the spouse and increasing WFC.

Meanwhile, although prior research shows that children in the home (Pfleger et al., 2018; Woodall et al., 2020), spouse adverse childhood experiences (Whisman et al. (2006); Woodall et al., 2020), and spouse employment (Woodall et al., 2020) are family risks which were expected to be associated with WFC, an overall cumulative effect was not found in this study at either the bivariate or multivariate levels. Counter to our expectations, although family risks may be experienced among military families, military spouses appear to experience military-specific work-related factors as more potent drivers of WFC. While both family and military are described as greedy institutions (Vuga & Juvan, 2013), these findings suggest spouses view military-related duties as more significant barriers to maintaining a balanced military work-family life.

Our findings also did not support our second hypothesis regarding the buffering effect of social support. Instead, in these results, social support appeared directly and negatively related to work-family conflict suggesting social support may operate as a promotive rather than a protective factor, suggesting that this factor attenuates the likelihood of a negative outcome regardless of risk exposure. Prior research showed that social support outside the family may buffer against potential work-family conflict (Ayman & Antani (2008)), lowering levels of emotional distress and improving marital functioning (Cederbaum et al., 2017; McFadyen et al., 2005). However, our findings suggest that the positive impact of social support operates directly, rather than by protecting spouses from the adverse effects of their military partners' work-related stressors. Future research should consider whether other factors may buffer against these risks. Coping skills, for example, have been shown to

have significant benefits for military spouses in other contexts (Sullivan et al., 2021), but have not been tested as a strategy to attenuate the relationship between military work-related risk factors and work-family conflict. As work-family conflict has been associated with a number of important outcomes for service members, spouses, and families, including job satisfaction, turnover, organizational commitment, family and marital satisfaction, and individual physical and mental health, these findings suggest that addressing work-family conflict may require military leadership to consider strategies to directly reduce work-related risk factors and foster social support as a promotive factor to reduce WFC among military families.

### Limitations

There were a number of limitations to note. First, analyses were based on cross-sectional data. Therefore, causality cannot be inferred. Second, data were self-reported and relied on spouses to report on service members' work risks, such as mental health and injuries, without input from the service members themselves. Third, data collection employed non-probability sampling methods, which may limit generalizability. This study also used secondary data, which meant relevant factors were determined based on available data and certain factors which might have been important to include were unavailable. Future studies on the intersection of military work risk factors and WFC could benefit from exploring other military-specific work risk factors, like frequent family moves, which were unavailable in this data set. Fourth, it should be noted that there is considerable variation in experiences among enlisted service members. However, rank was dichotomized between enlisted service members and officers to preserve statistical power. Fifth, the sample was collected from the Army spouses, so it is not possible to elaborate on experiences of other branches. Future studies should consider including spouses from other branches.

Finally, each risk factor variable was dichotomized and tallied to create cumulative work and family risk variables. For example, spousal employment was divided into two categories: those who reported "no paid employment, not looking for work" received a score of 0, while all others received a score of 1. A spouse with a full-time job received the same score as a spouse who works part-time or is unemployed. Similarly, families with one child in the home received the same score as those with multiple children, though these experiences are likely different. This method reflected cumulative risk but may not adequately capture nuance in the risk factors included. The impact of cumulative work and family risk factors on perceptions of work-family conflict, and in relation to social support, should be considered alongside studies which examine individual risk factors and their multiple dimensions.

### Implications

Despite limitations, the study findings highlight specific needs among military families. Those working with military spouses, couples, and families should pay special attention to the military-specific risk factors present, the impact of these risk factors on clients' lives, and potential interventions to address these impacts and needs. Clinicians should consider the cumulative effect of risk, with an awareness that individual risk factors, such as a service member's deployment history, may not be the only factor contributing to WFC.

These findings also suggest a need to foster supportive social relationships within military communities, as spouses who report having people in their lives on whom they can rely for basic needs reported lower levels of WFC. Spouses' formal integration into military communities may be relatively low, indicating a need for support development that goes beyond current efforts (Burrell et al., 2006). Clinicians should be attuned to spouses' social support systems, and screen for support needs when assessing and treating these clients. As social support may be effective to reduce WFC, military leadership and family organizations such as Family Readiness Groups and other military family organizations also should consider macro level interventions to help military spouses connect to each other to enhance their support system. This may be particularly helpful because adequately reducing service members' work risk may not be possible due to the nature of the profession.

### Disclaimer

Materials for this study have been reviewed by the Walter Reed Army Institute of Research. There is no objection to its presentation and/or publication. The opinions or assertions contained herein are the private views of the authors, and are not to be construed as official, or as reflecting true views of the Department of the Army or the Department of Defense. The investigators have adhered to the policies for protection of human subjects as prescribed in AR 70–25

### Compliance with ethical standards

**Conflict of interest** The authors declare no competing interests.

**Informed Consent** Informed consent was obtained from all individual participants included in the study.

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